

## INVESTIGATION OF PROSPECTIVE MATHEMATICS TEACHERS' SELF-EFFICACIES ABOUT USING VIRTUAL MANIPULATIVES

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### Abstract

The purpose of the study was to investigate prospective mathematics teachers' self-efficacy beliefs about using virtual manipulatives in teaching mathematics with respect to gender and grade level. Data were collected from 187 prospective teachers in the spring semester of 2015-2016. They were 126 junior and 61 senior students enrolled in teaching program at two different public universities in Turkey. A survey which aims to examine self-efficacy beliefs about using virtual manipulatives was administered. Semi-structured interviews were conducted with six participants regarding their survey scores. The results revealed that there was not significant effect of gender and grade level on self-efficacy beliefs about using virtual manipulatives. Furthermore, prospective teacher moderately had confidence in themselves about using virtual manipulatives. Additionally, they believed that using virtual manipulatives would have positive effects on students' learning and teaching process. However, they expressed they would have some difficulties during teaching mathematics with virtual manipulatives.

**Keywords:** Prospective teacher, virtual manipulatives, self-efficacy.